



Epidemiology Monthly Surveillance Report

Florida Department of Health in Orange County

Rabies Prevention

Rabies virus is transmitted when infected saliva from a rabid animal is passed to an uninfected host. Symptoms that first appear may resemble the flu (i.e., fever, headache), which then progress to cerebral dysfunction, anxiety, confusion, agitation. Infected individuals may also experience delirium, abnormal behavior, hallucinations, and insomnia. In the US, 1 to 3 rabies cases are reported annually. Since the 1970's, morbidity rates have been steadily declining due to animal control and vaccination programs, and the availability of modern rabies biologics.

In Orange County, FL, 888 individuals received post-prophylaxis between years 2008-2017. The most common wildlife sources of rabies in Florida are bats and racoons. Similarly, between years 2008-2017, 1,779 animal heads from bats, racoons, canines, cats, bobcats, foxes, and coyotes were tested in Orange County and a total of 55 samples were positive for the virus.

In October 2017 and January 2018, two human rabies cases were identified in Florida. The case-patients (unrelated) are associated with bat exposures in different counties in Florida. Rabies prevention is key as survival is rare with little success in treatment.

Rabies Prevention:

1. Avoid direct human and domestic animal contact with wild animals.
2. Have your veterinarian vaccinate pets and at-risk livestock, make sure you follow your veterinarian's instructions for revaccination.
3. Do not allow your pets to run free. Follow leash laws by keeping pets and livestock secured on your property.
4. Never feed wild or stray animals-avoid attracting them with outdoors food sources. Feed your pets indoors.
5. If your animal is attacked by a wild, stray or unvaccinated animal, DO NOT examine your pet for injuries without wearing gloves. DO wash your pet with soap and water to remove saliva from the attacking animal. DO NOT let your animal come into contact with other animals or people until the situation can be handled by animal control or county health department staff.
6. Educate the public to reduce contact with stray and feral animals.
7. Support animal control in efforts to reduce feral and stray animal populations.
8. Provide pre-exposure prophylaxis for people in high-risk professions, such as animal control and veterinary personnel, laboratory workers, and those working with wildlife.
9. "Bat-proof" your home.

Individuals bitten or scratched by a wild animal, even if the wound seems minor, should seek medical advice for appropriate follow-up. Please contact the Florida Department of Health in Orange County at (407) 858-1420 to speak with Deborah Andrews, the Rabies Control Nurse, regarding rabies consultation and prophylaxis.

Resources: [CDC: Human Rabies](#) [FDOH : Rabies](#)

January 2018

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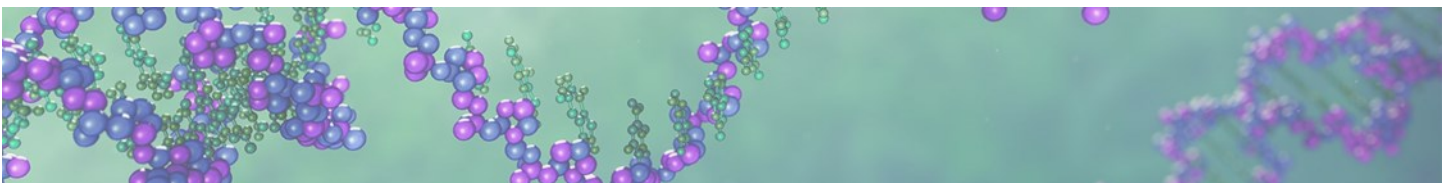
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Influenza Surveillance (data from [Florida Flu Review](#))

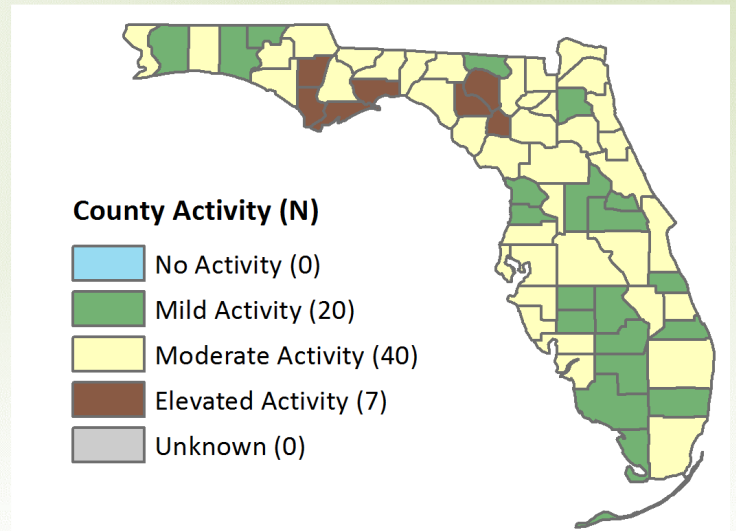
Florida

- ◆ In week 4, state influenza and ILI activity was at higher levels than at the highest points in previous seasons.
- ◆ Influenza A (H3) has been the most common strain identified nationally and in Florida.
- ◆ Deaths due to pneumonia and influenza were slightly higher than expected, and will likely increase in the coming weeks.
- ◆ Two influenza-associated pediatric deaths were confirmed, bringing the total to five for the season.

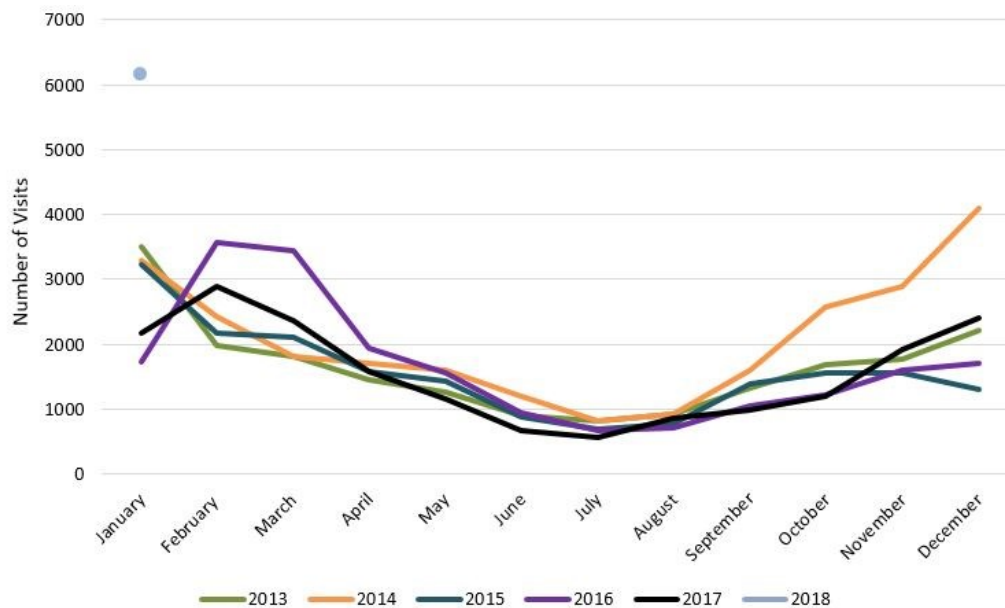
Orange County

- ◆ Ten outbreaks of influenza were reported in Orange County in January 2018.
- ◆ Orange County influenza activity level for week 4 is increasing.

Influenza Activity Level, by County for Week 4, 2018



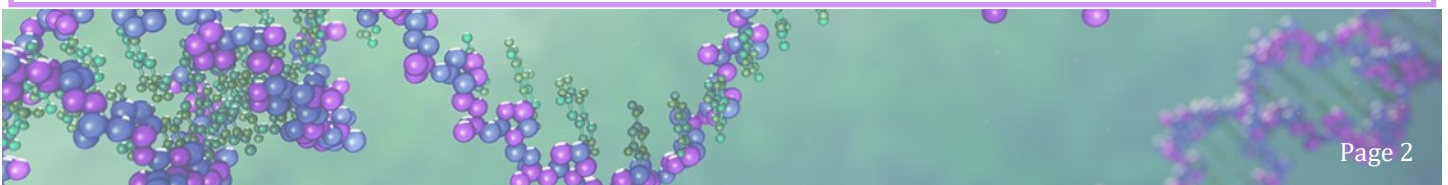
Influenza-like Illness from Emergency Department Visits in Orange County, 2013 to 2018



Influenza Resources:

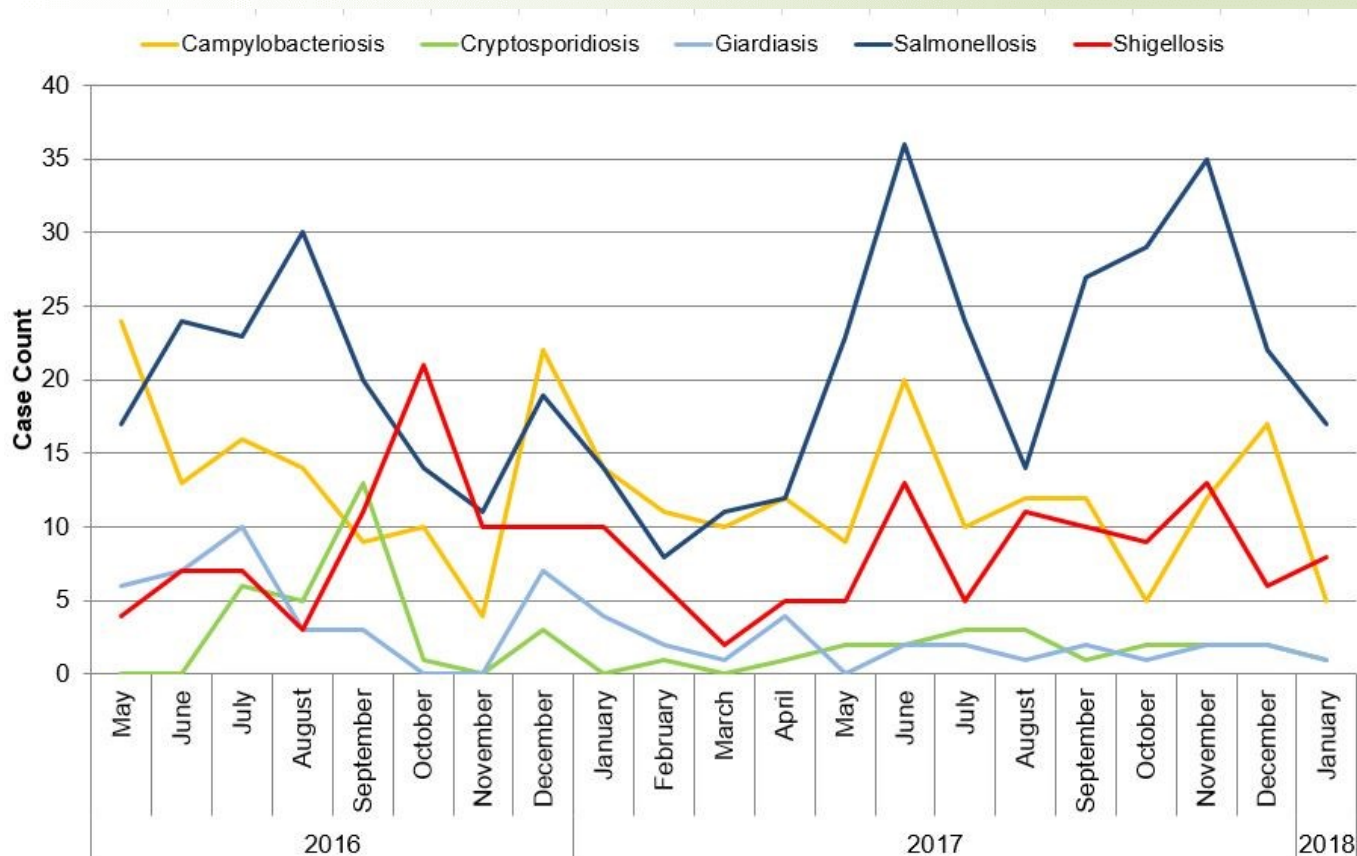
[Florida Department of Health Influenza](#)

[Center for Disease Control and Prevention Weekly Influenza Activity Report](#)



Gastrointestinal Illness Surveillance

Select Reportable Enteric Diseases in Orange County, Florida, May 2016 to January 2018



Gastrointestinal Illness Points of Interest:

- Enteric reportable disease cases were low for the month of January.
- In January, 15 foodborne illness complaints were investigated by Orange County from various sources such as direct reporting, online reporting, social media, Department of Health, and crowd-sourced web-based reporting.

[REPORT
FOODBORNE
ILLNESS ONLINE](#)

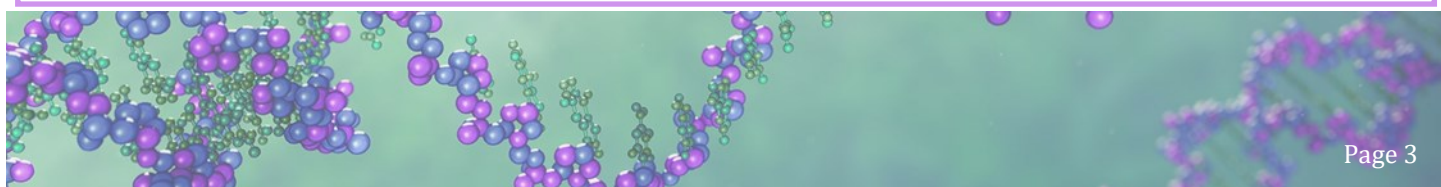
Gastrointestinal Illness Resources:

[Florida Online Foodborne Illness Complaint Form - Public Use](#)

[CDC: Healthy Water](#)

[Florida Food and Waterborne Disease Program](#)

[CDC: A-Z Index for Foodborne Illness](#)



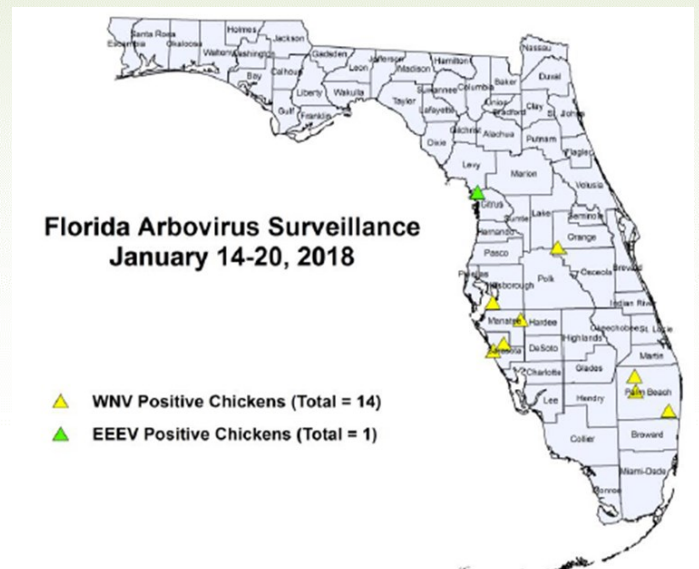
Arboviral Surveillance

International

- There is a CDC Level 2 (Alert) Travel Health Notice for multiple countries in the Caribbean, Central and South America, Mexico, Cape Verde, Southeast Asia, and Pacific Islands related to Zika and poor pregnancy outcomes.
- There is a CDC Level 2 Travel Health Notice for Brazil related to the transmission of yellow fever virus.
- There is a CDC Level 1 (Watch) Travel Health Notice for Brazil and Italy, related to the transmission of chikungunya virus.
- There is a CDC Level 1 Travel Health Notice for Sri Lanka and Vietnam related to the transmission of dengue virus.

Florida

- Nineteen travel-associated cases of dengue have been reported in 2017. **One case of chikungunya fever** was reported this week in a person that had international travel.
- No human cases of West Nile Virus were reported this week. A total of four human cases of WNV illness acquired in Florida have been reported in 2017.
- **No counties are currently under mosquito-borne illness advisory or alert.**



Orange County

- **No locally acquired** cases of Zika virus, West Nile virus, dengue virus, chikungunya virus, St. Louis encephalitis virus, or eastern equine encephalitis virus have been identified in Orange County in 2018.
- No travel-related cases of Zika virus were reported in January 2018. In 2017, there were 19 travel-related cases of Zika virus.
- **We are no longer offering free Zika testing at DOH-Orange for insured pregnant women. Testing for Zika may be ordered through commercial labs. Please notify DOH-Orange of symptomatic patients with a history of travel. Please refer to the following [letter](#) regarding updates on Zika virus testing at BPHL.**

Arboviral Resources:

[Weekly Florida Arboviral Activity Report \(Released on Mondays\)](#)

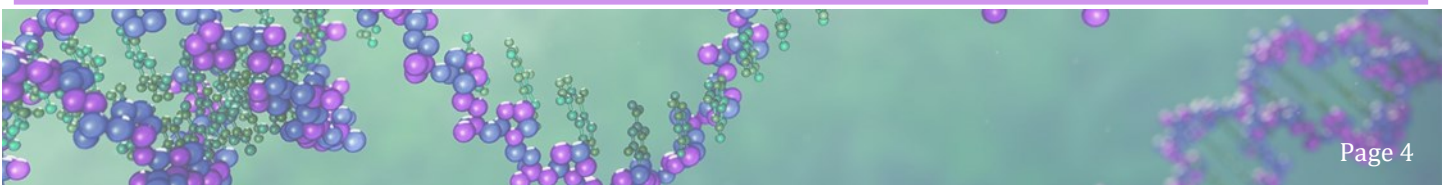
[Orange County Mosquito Control](#)

Additional Resources:

[Florida Department of Health Zika](#)

[Florida Department of Health Mosquito-Borne and Other Insect-Borne Diseases Information](#)

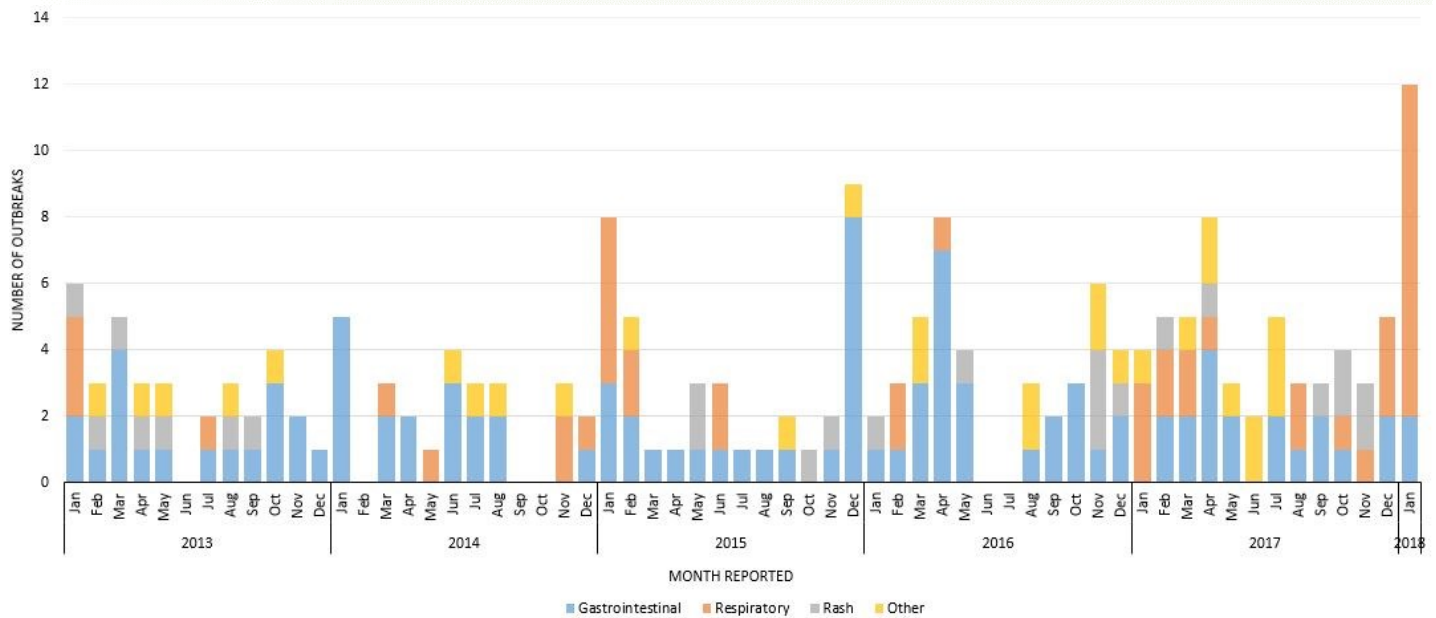
[Florida Department of Health Mosquito-Borne Disease Education Materials](#)



Outbreaks in Orange County

- In January 2018, the following outbreaks were investigated:
 - Four influenza A outbreaks, an influenza B outbreak, and two influenza-like illness outbreaks at long term care facilities.
 - Three influenza A outbreaks in schools.
 - A gastrointestinal illness outbreak in an assisted living facility.
 - A gastrointestinal illness outbreak associated with a banquet hall event.

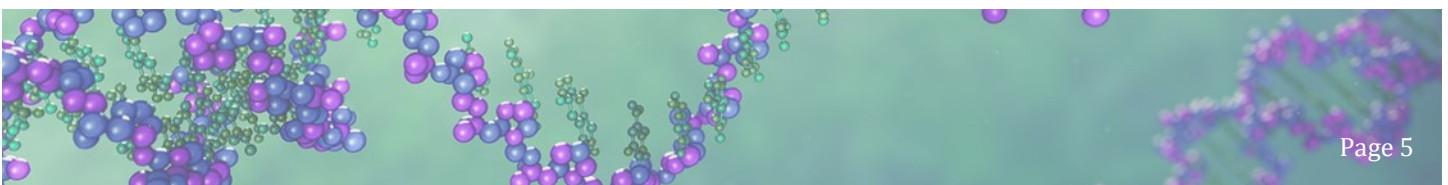
Number of Outbreaks Reported in Orange County, FL, by Month from 2013-2018



*** All Data are Preliminary ***



Reminder: Outbreaks of any disease, any case, cluster of cases, or exposure to an infectious or non-infectious disease, condition, or agent found in the general community or any defined setting (e.g., hospital, school, or other institution) not listed that is of urgent public health significance should be reported.



Disease	ORANGE				All Counties			
	January		Cumulative (YTD)		January		Cumulative (YTD)	
	2018	Median (2013 - 2017)	2018	Median (2013 - 2017)	2018	Median (2013 - 2017)	2018	Median (2013 - 2017)
Anaplasmosis - HGA (Anaplasma phagocytophilum)	0	0	0	0	1	1	1	1
Arsenic Poisoning	0	0	0	0	2	0	2	0
Brucellosis	0	0	0	0	1	0	1	0
Campylobacteriosis	14	11	14	11	347	279	347	279
Carbon Monoxide Poisoning	0	0	0	0	31	19	31	19
Ciguatera Fish Poisoning	0	0	0	0	3	1	3	1
Creutzfeldt-Jakob Disease (CJD)	0	0	0	0	1	1	1	1
Cryptosporidiosis	1	2	1	2	36	40	36	40
Dengue Fever	0	0	0	0	0	14	0	14
Ehrlichiosis - HME (Ehrlichia chaffeensis)	0	0	0	0	1	0	1	0
Escherichia coli: Shiga Toxin-Producing (STEC) Infection	7	2	7	2	77	39	77	39
Giardiasis: Acute	1	5	1	5	71	84	71	84
Haemophilus influenzae Invasive Disease	4	2	4	2	46	25	46	25
Hansen's Disease (Leprosy)	0	0	0	0	0	1	0	1
Hemolytic Uremic Syndrome (HUS)	0	0	0	0	0	1	0	1
Hepatitis A	1	1	1	1	24	10	24	10
Hepatitis B: Acute	3	1	3	1	91	35	91	35
Hepatitis B: Chronic	36	27	36	27	383	382	383	382
Hepatitis B: Surface Antigen in Pregnant Women	3	6	3	6	33	39	33	39
Hepatitis C: Acute	1	1	1	1	63	23	63	23
Hepatitis C: Chronic	141	116	141	116	2298	2321	2298	2321
Hepatitis D	0	0	0	0	1	0	1	0
Hepatitis E	0	0	0	0	1	0	1	0
Influenza-Associated Pediatric Mortality	0	0	0	0	4	1	4	1
Lead Poisoning	9	1	9	1	81	47	81	47
Legionellosis	2	2	2	2	53	29	53	29
Leptospirosis	0	0	0	0	1	0	1	0
Listeriosis	0	0	0	0	4	5	4	5
Lyme Disease	0	0	0	0	11	10	11	10
Malaria	0	1	0	1	4	6	4	6
Measles (Rubeola)	0	0	0	0	0	2	0	2
Meningitis: Bacterial or Mycotic	0	0	0	0	13	12	13	12
Meningococcal Disease	0	0	0	0	3	5	3	5
Mercury Poisoning	0	0	0	0	4	2	4	2
Mumps	1	0	1	0	52	2	52	2
Paratyphoid Fever (Salmonella Serotypes Paratyphi A B C)	0	0	0	0	1	0	1	0
Pertussis	1	2	1	2	21	28	21	28
Pesticide-Related Illness and Injury: Acute	0	0	0	0	1	1	1	1
Rabies: Possible Exposure	5	7	5	7	292	221	292	221
Ricin Toxin Poisoning	0	0	0	0	1	0	1	0
Rocky Mountain Spotted Fever and Spotted Fever Rickettsiosis	0	0	0	0	2	1	2	1
Salmonellosis	25	21	25	21	360	346	360	346
Shigellosis	9	3	9	3	86	77	86	77
Strep pneumoniae Invasive Disease: Drug-Resistant	7	3	7	3	62	25	62	25
Strep pneumoniae Invasive Disease: Drug-Susceptible	2	4	2	4	63	47	63	47
Tetanus	0	0	0	0	0	1	0	1
Typhoid Fever (Salmonella Serotype Typhi)	0	0	0	0	6	1	6	1
Varicella (Chickenpox)	3	2	3	2	50	64	50	64
Vibriosis (Grimontia hollisae)	0	0	0	0	0	1	0	1
Vibriosis (Other Vibrio Species)	0	0	0	0	4	1	4	1
Vibriosis (Vibrio alginolyticus)	1	0	1	0	3	2	3	2
Vibriosis (Vibrio cholerae Type Non-O1)	0	0	0	0	0	1	0	1
Vibriosis (Vibrio fluvialis)	0	0	0	0	0	1	0	1
Vibriosis (Vibrio parahaemolyticus)	0	0	0	0	3	4	3	4
Zika Virus Disease and Infection- Non-Congenital	1	0	1	0	17	0	17	0
Total	278	220	278	220	4714	4258	4714	4258

*** All Data are Preliminary ***

The Lone Star Tick and Red Meat Allergy

Over the years, research has suggested that a link between an allergy to alpha-gal, a sugar molecule found in red meat, and exposure to Lone Star tick bites may exist. The Lone Star tick is commonly found in the southeastern and eastern United States, and is considered to be highly aggressive. A recent study conducted by the National Institute of Allergy and Infectious Diseases (NIAID) evaluated 70 participants suffering from unexplained anaphylaxis and identified an alpha-gal allergy among six of the participants. The authors suspect many clinicians misdiagnose those with alpha-gal allergy as an unexplained anaphylaxis, partly due to the atypical timing of reaction onset, which ranges from 3 to 6 hours after eating red meat. Although there is limited evidence showing the association between Lone Star tick bites and a red meat allergy, preventive measures should be encouraged.



DOH-Orange recommends taking precautions against ticks year-round and avoiding wooded and brushy areas with high grass. Recommendations include walking in the center of trails, using repellent with at least 20 percent DEET, and using permethrin on clothing and outdoor gear. If ticks are found on the body, be sure to bathe or shower as soon as possible and wash off any ticks, conduct a full-body tick check when returning from tick-infested areas. Carefully examine pets and all clothing and gear for ticks. To effectively kill ticks on clothing, run them through a dryer cycle on high heat for 10 minutes.

Resources: [NIAID News Release](#) [CDC Preventing Tick Bites](#)


Other Disease Resources

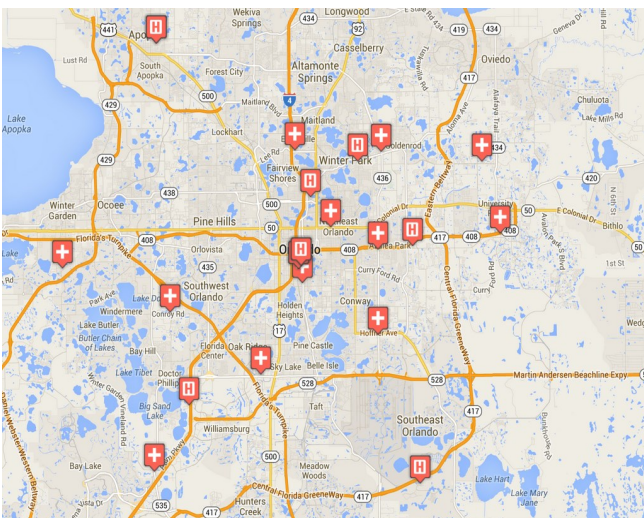
In the structure of DOH-Orange, tuberculosis, sexually transmitted infections, and human immunodeficiency virus are housed in separate programs from the Epidemiology Program. We recognize the importance of these diseases for our community partners and for your convenience have provided links for surveillance information on these diseases in Florida and Area 7 HIV & AIDS Program (Brevard, Orange, Osceola, and Seminole Counties).



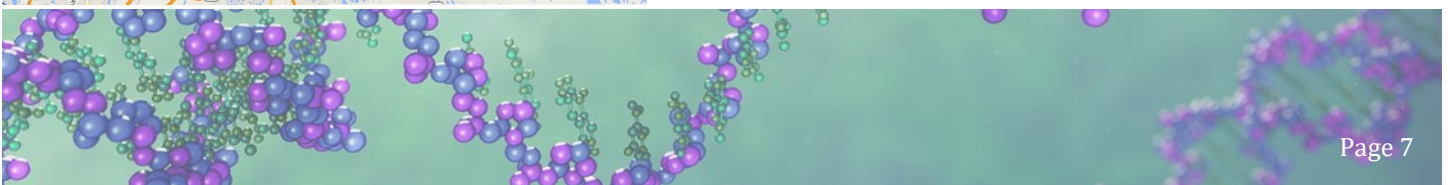
 **Florida Department of Health: ESSENCE**

Hospital linked to ESSENCE

 Florida Hospital Centra Care Clinic linked to ESSENCE



Since 2007, the Florida Department of Health has operated the Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE-FL), a state-wide electronic bio-surveillance system. The initial scope of ESSENCE was to aid in rapidly detecting adverse health events in the community based on Emergency Department (ED) chief complaints. In the following years, ESSENCE capabilities have continually evolved to currently allow for rapid data analysis, mapping, and visualization across several data sources, including ED record data, Merlin reportable disease data, Florida Poison Information Network consultations, and Florida Office of Vital Statistics death records. The majority of the information presented in this report comes via ESSENCE. Florida currently has 228 emergency departments and 35 urgent care centers reporting to ESSENCE-FL for a total of 263 facilities.



Florida Department of Health in Orange County

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The Epidemiology Program conducts disease surveillance and investigates, controls, and prevents infectious diseases and conditions that are reported to DOH-Orange.

Surveillance is primarily conducted through passive reporting from the medical community as required by Chapter 381, Florida Statutes.

Data are collected and analyzed to track disease trend, and identify outbreaks and unusual occurrences for response and mitigation, to identify targets for prevention and reduction efforts.

In cooperation with the Office of Emergency Operations, the Epidemiology Program conducts syndromic and influenza-like-illness surveillance activities. Syndromic surveillance was added to the disease reporting process as an active method of determining activities in the community that could be early indicators of outbreaks and bioterrorism.

Our staff ensure that action is taken to prevent infectious disease outbreaks from occurring in Orange County communities and area attractions. Along with many public and private health groups, we work for the prevention of chronic and long-term diseases in Central Florida.

ALL DATA ARE PROVISIONAL

